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Inscribed Stone of Grave Creek Mound. Report on—by M. C. Reid, of Hudson, Ohio, read at the meeting of the State Archæological Society, held at Wooster, Ohio, Sept. 25, 1878. (Ext. Am. Antiquarian, Vol. I, No. 3.) 8vo, pp. 139–149. From the author.

Note sur le bassin tertiaire de Bahna (Roumanie). Par M. Stephanesco. (Ext. du Bull. de la Soc. Geol. de France. 3e Série, to. v, pp.387–293. Séance du 19 Mars, 1877.) 8vo, with plate. From the author.

Jura-Trias Section of South-eastern Idaho and Western Wyoming. By A. C. Peale, M.D. (Ext. from the Bull. of the U. S. Geol. and Geog. Surveys, Vol. v, No. 1.) 8vo, pp. 119–123. (Washington, Feb. 28, 1879.) From the author.

Classification of Coals. By Persifor Frazer, Jr., Philadelphia. (Ext. from Trans. Am. Inst. of Mining Engineers, Vol. VI, read at the Wilkesbarre meeting, May, 1877.) Author's edition, 1879. From the author.

On the Structure of the Gorilla. By Henry C. Chapman, M.D. (Ext. Proc. Acad. Nat. Sciences, Phila., 1878.) 8vo, pp. 385–394, pls. III–VI. From the author.

Fossil Forests of the Volcanic Tertiary Formations of the Yellowstone National Park. By W. H. Holmes. (Ext. from the Bull. of the U. S. Geol. and Geog. Survey, Vol. v, No. 1). 8vo, pp. 125–132. (Washington, Feb. 28, 1879. From the author.

On the Association of Dwarf Crocodiles (*Nannosuchus* and *Theriosuchus pusillus*, e. g.), with the Diminutive Mammals of the Purbeck Shales. By Prof. Richard Owen, C.B., F.R.S., F.G.S. (Ext. from Quart. Journ. Geol. Soc., London, Feb., 1879.) 8vo, pp. 148–155, with plate. From the author.

A Catalogue of Official Reports upon Geological Surveys of the United States and Territories, and of British North America. By Frederick Prime, Jr., Assistant Geologist of Pennsylvania. 8vo, pp. 51. (Proof copy.) Philadelphia. March 15, 1879. From the author.

Catalogue of the Birds collected in Martinique, by Mr. Fred. A. Ober, for the Smithsonian Institution. By Geo. N. Lawrence. (Ext. Proc. U. S. National Museum.) 8vo, pp. 349–360. From the author.

Proceedings of the Academy of Natural Sciences of Philadelphia. Part III, 1878. 8vo, pp. 329–475, plf. III–VI. Philadelphia, 1879. And the same, pp. 9–24, of the volume for 1879. From the society.

Richthofen's Theory of the Loess, in the light of the Deposits of the Missouri. By J. E. Todd, of Tabor, Iowa. (Ext. from Proc. Am. Asso. Adv. of Science, Vol. XXVII. St. Louis meeting, Aug., 1878.) 8vo, pp. 10. From the author.

The Engineering and Mining Journal (Miniature copy). 12mo. No. 25 of Vol. XXVI. New York, Dec. 21, 1878. From the editor.

Boletin del Ministerio de Fomento de la Republica Mexicana. Folio (Daily) from March 13, to Feb. 20, 1879. From the Director of the Central Meteorogical Observatory.

Proceedings of the National Academy of Sciences for 1878. 8vo, pp. 125–142. From the Academy.

Chesapeake Zoölogical Laboratory, Johns Hopkins University, Baltimore, Md. Scientific Results of the Session of 1878. (June 24th to Aug. 19th.) 8vo, pp. 190, pls. 13. Baltimore, John Murphy & Co., 1879. From the University.

Sur les Reptiles du temps primaires. Par M. Alb. Gaudry. (Ext. from Comptes Rendus de l'Academie des Sciences, 16 Decembre, 1878.) 4to, pp. 3. From the author.

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GENERAL NOTES.

BOTANY.

INSTINCT AND REASON, BY F. C. CLARK.—"Wonders of the vegetable world" never cease. Some of them are brought to light in the pages of the February number of the AMERICAN NATURALIST. "Leaves often change to roots, and roots in favorable circumstances become leaves." "The plant * * * for reproductive purposes has nettles, thorns, elastic films, as in the seed vessels of the squirting cucumber." "If the well-known sensitive plant be touched never so lightly, its flowers and leaves close." "The 'resurrection plant,' generally known as the Rose of Jericho * * * * to all appearance a mass of dry, dead vegetable fibre * * * when sufficient moisture is applied it revives, its leaves expand, it is clothed in new verdure, and as its blossoms unfold, the reanimated plant is clothed in all its former beauty." "When night approaches flowers close their petals * * * * * some plants, however, only flower at night. The beautiful Yuccas a species of wild lily, only blossom when the moon is out." The small leaflets of *Desmodium gyrans* "move up and down in alternate jerks, at the rate of sixty a minute. * * * This motion is continued during all the seasons of the year, and during the whole life-time of the plant."

For all but one of these wonders the authority cited is "Wonders of the Vegetable World, by Schele DeVere." This book we believe to be a second edition of one entitled A Salad for the Solitary, which was noticed in the *American Journal of Science and the Arts* a good many years ago. It was then remarked that "Ignorance is not a sin *per se*, its heinousness depends on the use that is made of it." The following wonders, like that of the blooming of the Yuccas in moonlight, are more original, or at least more modern. In *Darlingtonia californica* "beautiful red wattles within the brim of its pitcher offer irresistible attractions to insects, especially to flies. These alight first upon the 'wattles,' then flying upward strike the pitcher, and owing to the peculiar twist of its walls falls to the bottom of the receptacle, where many another thoughtless fly has, too late, found its sepulchre." Why too late?

"Mrs. Treat has studied the habits of this plant (bladder wort, *Utricularia neglecta*), and learned that it allures animalcules by means of its bright flowers and leaves glistening with dew."

Some sentences are wondrous in other ways: *e. gr.* "For the removal of obstacles the plant has two courses, to disintegrate the object opposed to its progress, absorbing it if it be a suitable nutritive element, as are all animal and vegetable substances, and some minerals, or pass around it; or still again, as in extreme cases, to bury it up in its own substance, as are stones, bayonets, nails and the like."

Now a popular article, when it touches upon subjects of which the writer knows little or nothing, should be judged forbearingly when it goes wildly astray. In an ordinary magazine it would matter little, but in the pages of the AMERICAN NATURALIST these statements gain an importance and a currency which is not altogther pleasant. The undersigned does his duty in simply calling attention to the matter.—*Asa Gray.*

HENSLOW ON THE SELF-FERTILIZATION OF PLANTS.—The Rev. George Henslow concludes from his studies on the structure of plants, that the prevailing views as to the necessity of cross-fertilization are too extreme. He claims that "Mr. Darwin's works have gone too far to strengthen the belief that intercrossing is absolutely necessary for plants; and that if self-fertilization be continued for lengthened periods the plants tend to degenerate and thence to ultimate extinction. This I believe to be absolutely false." Mr. Henslow arrives at the following conclusions in his article in the Popular Science Review: "1. The majority of flowering plants can, and possibly do, fertilize themselves. 2. Very few plants are known to be physiologically self-sterile when the pollen of a flower is placed on the stigma of the same flower. 3. Several plants are known to be morphologically self-sterile in that the pollen cannot, without aid, reach the stigma, but is effective on that of the same flower. 4. Self-sterile plants from both the above causes can become self-fertile. 5. Highly self-fertile forms may arise under cultivation. 6. Special adaptations occur for self-fertilization."

CONTRACTION OF LEAVES OF SENSITIVE PLANTS.—In Sir J. D. Hooker's recent address as President of the Royal Society, it is stated that Dr. Burdon Sanderson has for two years past been studying the true relations between the electrical disturbances followed by the shutting of the leaf valves of Dionæa, and the latent change of protoplasm which precedes this operation. He has found that though the mechanism of the change of form of the excitable parenchyma which causes the contraction is entirely different from that of muscular contraction, yet that the correspondence between the exciting process in the animal tissues and what represents this in the plant tissues appears to be more complete the more carefully the comparison is made; and that whether the stimulus be mechanical, thermal, or electrical, its effects correspond in each case. Again, the excitation is propagated from the point of excitation to distant points in the order of their remoteness, and the degree to which the structure is excited depends upon its temperature. Notwithstanding, however, the striking analogies between the electrical properties of the cells of Dionæa and of muscle-cylinders, Dr. Burdon Sanderson is wholly unable to admit with Prof. Munk that these structures are in this respect comparable.

ZOÖLOGY.[1]

DISCOVERY OF MALE EELS.—We are glad to state that finally what we believe to be genuine male eels have been discovered. In the January number of this journal it was announced by Prof. Packard that he had discovered male eels. A number of the supposed males were afterward again examined, by Prof.

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[1] The departments of Ornithology and Mammalogy are conducted by Dr. ELLIOTT COUES, U. S. A.